

Climatological Data for July, 1909.

DISTRICT No. 1, NORTH ATLANTIC STATES.

WILFORD M. WILSON, District Editor.

INTRODUCTION.

Climatological District No. 1 includes all that part of the United States extending from the watershed of the St. Croix River between Maine and the Province of New Brunswick southward to the drainage basin of the York River in Virginia, both inclusive. It therefore includes the following States or parts of States, the various watersheds of which drain eastward or southward into the Atlantic Ocean: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; that part of New York embraced in the Hudson, Delaware, and Susquehanna drainage basins; the eastern part of Pennsylvania, also drained by the Susquehanna and Delaware systems; all of New Jersey and Delaware, and most of Maryland; that part of West Virginia that includes the headwaters of the Potomac; and the eastern part of Virginia as far south as to include the drainage basin of the York River.

In order to study the relation of precipitation and water supply to the many important industries spread throughout this area the principal and subordinate watersheds will be mentioned in the text as occasion may require and reference is here made to Table 2, daily precipitation, for the appropriate names of these numerous subdivisions. There are in this district something over 350 cooperative observers making daily observations of temperature, precipitation, wind, and weather; and to summarize and treat this mass of data from the special viewpoint appropriate to the agriculturist, navigator, railroad official, hydraulic engineer, forester, and those interested in the problems of water supply, whether student, teacher or theoretical climatologist, is an impossible task; and while effort will be made to group together in the general summary the more important climatological features as they occur from month to month, it is believed that the detailed climatological data presented in the tables will furnish sufficient material for an intelligent study of the relation of climatic conditions to almost any special industry that it may be found desirable to undertake. In this connection it may be said that the original observations made by the 350 or more observers in the district contain much important information, especially with respect to temperature, the beginning and ending of precipitation, the state of the weather, etc., which it has not been practicable to include in the tables. This information is on file and the Chief of the Weather Bureau will be glad to comply with any reasonable request for additional data not published in the tables.

TEMPERATURE.

The monthly mean temperatures were decidedly below normal over the entire district, the average deficiency being 2.2° . The deficiency was less over New York and the southern part of New England than elsewhere and greatest in Delaware and West Virginia where it averaged about 3° .

The average temperature for the New England States, 67.2° , was the lowest for any July during the past twenty-one years except in 1888, 1891, and 1902, while the mean of the current month for New York and New Jersey was the lowest since 1895, and for Virginia since 1891. There were many places in the district where the average for the month was the lowest on record.

The unusually warm weather that marked the closing days of June, began to moderate by the 1st of July and the temperature fell quite rapidly on the 2d and 3d. The 4th and 5th were remarkably cool for the season over the entire district with minimum temperatures dangerously near the frost point in the more exposed localities. At Layton, Sussex County, N. J., the temperature fell to 36° on the morning of the 5th, which is the lowest recorded in July at that station in

twenty-five years.. A rapid rise in temperature began over the southern part of the district on the 8th, several stations in Virginia reporting a rise of 40° or more on that date. The cool weather continued, however, over the northern part of the district until the 11th, the lowest temperatures for the month in New York and the New England States being generally recorded on the 9th. The lowest temperature recorded in the district, 30° , occurred at Gabriels and Indian Lake, stations in the Adirondack Mountains, on the 9th. The return to the normal was not so abrupt over the northern part of the district as noted in Virginia, but a well marked warm period developed, continuing in most sections until near the close of the second decade, when a rapid decline in temperature occurred, especially over West Virginia. Light frosts were reported from several localities in that section on the 19th and 20th. The warmest period of the month occurred at the close of the third decade, the 30th being the date on which the maximum temperature of the month was most generally recorded.

PRECIPITATION.

The current month ranks among the driest Julys since the Climatological Service was established. For the district as a whole the average deficiency was somewhat over two inches, which is about 50 per cent of the normal.

Although there was a gradual increase in the deficiency from Maine southward to Maryland and Virginia where the total precipitation for the month was only about 40 per cent of the normal, the average rainfall over New England was the least in twenty-one years, and in New York and New Jersey the least in fifteen years.

As is usually the case during the summer months when local storms are most frequent, the geographical distribution of the rainfall was decidedly irregular and uneven, Patten in the Penobscot basin reporting a total for the month of 6.42 inches, while only 0.20 inch occurred at Clear Spring in the Potomac Valley in Maryland. The distribution in point of time was also irregular. About 60 per cent of the total rainfall for New Jersey occurred with a single storm on the 23d, while at many individual stations practically all the rain for the month occurred in one day.

The month opened with fair and pleasant weather except in parts of New England where light showers were reported on the 1st and 2d. On the 3d general rains occurred over New England and New York, the fall being moderately heavy in Maine and New Hampshire, but light elsewhere. In New England the weather continued threatening with light, scattered showers alternating with clear skies until the middle of the second decade. For the remainder of the district, except for the light showers that occurred on the 6th, there was practically no rain and but little cloudiness until near the close of the second decade. The most general rains of the month occurred from the 14th to the 18th and from the 22d to the 24th. Thunderstorms were frequent during these periods and in some localities the precipitation was heavy. From the 25th to the close of the month only light and scattered showers occurred. As a rule the drought was severely felt throughout the district, except in parts of New England, until the occurrence of the general rains at the beginning of the third decade, which, however, afforded but temporary relief. At the close of the month there was again a general need for moisture.

The rivers and streams are at a very low stage and economy is necessary in the use of the water supply for cities and towns.

The average amount of sunshine was above the normal for the month throughout the district.

TABLE 1.—*Climatological data for July, 1909. District No. 1, North Atlantic States.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Number of part- ly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest. Date.	Lowest. Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unadjusted.	Number rainy days, 0.1 inch or more.	Sky.		
<i>Maine.</i>																
Bar Harbor.	Hancock.	20	23	65.0	- 0.6	90 28	44	8 34	2.66	- 0.36	1.20	0.0	12 9	15 7	sw.	William Miller.
Cornish.	York.	778	54	67.0	- 2.0	91 15†	46 5†	36 3.13	- 1.14	1.03	0.0	9 9	16 6	nw.	T. H. West.	
Eastport.	Washington.	53	37	60.0	+ 0.2	55 28	45 8	31 3.37	- 0.05	1.33	0.0	12 4	15 12	s.	U. S. Weather Bureau.	
Fairfield.	Somerset.	90	24	67.2	- 0.7	90 29	46 6†	32 1.77	- 1.68	0.75	0.0	5 5	16 10	...	E. F. Parker.	
Farmington.	Franklin.	450	12	65.2	- 2.2	91 28	41 6	38 2.05	- 1.85	0.85	0.0	8 15	11 5	nw.	State Normal School.	
Gardiner.	Kennebec.	163	17	66.0	- 4.5	91 28	45 7†	37 2.19	- 1.06	0.90	0.0	8 16	8 7	sw.	S. D. Soule.	
Greenville.	Piscataquis.	1,000	5	61.7	...	85 28	35 7	33 3.34	- 1.53	1.17	0.0	11 7	19 4	ne.	U. S. Weather Bureau.	
Houlton.	Aroostook.	363	7	66.6	...	89 30	40 4	36 2.15	- 0.38	1.00	0.0	7 19	4 8	ne.	Bangor & Aroostook R.R.	
Lewiston.	Androscoggin.	185	35	65.0	- 4.5	89 29	44 5	33 2.47	- 1.10	0.97	0.0	7 13	9 9	nw.	Union Water Power Co.	
Madison.	Somerset.	257	6	65.0	...	91 30	41 6	34 2.25	- 3.64	0.78	0.0	11 12	10 9	s.	Wm. Jardine.	
Millinocket.	Penobscot.	386	6	66.6	...	93 28	44 7	38 3.09	- 0.92	1.13	0.0	15 4	13 14	sw.	H. S. Ferguson.	
North Bridgton.	Cumberland.	450	16	67.3	- 2.2	93 28	44 5	35 2.00	- 2.65	0.80	0.0	9 3	24 4	sw.	G. E. Chadbourne.	
Orono.	Penobscot.	129	40	66.6	- 0.7	91 28†	42 6	33 2.37	- 1.07	0.46	0.0	11 8	9 14	nw.	Agricultural Exp. Stat'n.	
Patten ⁴ .	Penobscot.	550	7	64.2	...	88 28	40 6†	35 6.42	+ 2.62	2.00	0.0	14 12	7 8	w.	Bangor & Aroostook R.R.	
Portland.	Cumberland.	99	38	68.4	- 1.6	91 30	50 9	27 2.14	- 1.11	0.93	0.0	11 13	13 5	nw.	U. S. Weather Bureau.	
Rumford Falls.	Oxford.	505	16	65.8	- 2.5	90 28	45 6	34 2.34	- 1.95	0.70	0.0	5 23	4 4	nw.	Chas. A. Mixer, C. E.	
Van Buren ^a .	Aroostook.	510	7	64.9	...	88 28	37 5	40 5.80	+ 1.60	1.30	0.0	14 12	4 12	...	Bangor & Aroostook R.R.	
Winlaw.	Kennebec.	90	14	66.3	...	92 29	41 7	38 1.95	- 2.95	0.68	0.0	8 16	11 4	w.	Hollingsworth & Whitney.	
<i>New Hampshire.</i>																
Alstead Center.	Cheshire.	1,120	5	65.2	...	86 15†	45 5†	31 3.43	- 1.14	1.30	0.0	9 20	7 4	nw.	Frank Dewing.	
Benton.	Grafton.	1,470	17	63.5	- 3.6	87 29	49 7	34 3.13	- 3.07	1.14	0.0	10 14	10 7	sw.	State Sanatorium.	
Bethlehem.	Merrimac.	350	49	67.0	- 2.1	91 29	43 5	36 2.14	- 1.65	1.04	0.0	8 7	20 4	...	Benj. Tucker.	
Durham.	Stafford.	88	14	67.6	- 2.3	96 29	46 6†	31 1.73	- 1.52	0.71	0.0	8 17	8 6	sw.	U. S. Weather Bureau.	
Franklin.	Merrimac.	440	10	67.0	...	91 28†	41 5	37 3.08	- 0.35	1.05	0.0	10 14	13 4	w.	Agricultural Exp. Stat'n.	
Grafton.	Grafton.	803	23	64.4	- 3.4	93 30	36 5	41 2.03	- 1.94	1.80	0.0	10 18	6 7	nw.	Dr. C. P. Webster.	
Hanover.	Grafton.	603	75	66.3	- 2.9	92 15†	41 5	40 0.58	- 2.91	0.17	0.0	8 7	18 8	sw.	P. R. Kimball.	
Keene.	Cheshire.	506	24	68.3	- 3.0	93 29	37 5	42 1.48	- 2.66	0.65	0.0	9 16	11 4	nw.	Dartmouth College.	
Nashua.	Hillsboro.	125	24	70.0	- 0.7	95 30	46 5†	35 2.17	- 1.25	0.84	0.0	5 19	10 15	5 nw.	Samuel D. Wadsworth.	
Newton.	Rockingham.	21	66.8	- 2.4	93 30	41 9	37 2.49	- 0.99	1.16	0.0	7 9	20 2	nw.	Jackson Company.		
Plymouth.	Grafton.	500	21	65.5	- 2.1	90 29	39 5	40 2.69	- 0.73	0.90	0.0	8 20	2 9	w.	W. C. Gale.	
West Ossipee.	Carroll.	1	67.8	...	100 27	30 9	60 1.90	...	0.80	0.0	6 27	4 4	w.	Mrs. H. G. Trow.		
<i>Vermont.</i>																
Bloomfield.	Essex.	2	63.2	...	88 28	37 7	39 3.23	...	0.88	0.0	12 14	11 6	s.	Lyman Falls Co.		
Cavendish.	Windsor.	910	6	65.4	...	92 29†	41 5†	41 2.05	- 0.01	0.75	0.0	9 9	11 11	w.	Miss M. A. Kingsbury.	
Chelsea.	Orange.	1,640	14	63.2	- 4.0	88 13	42 5	35 2.08	- 3.81	0.58	0.0	9 11	9 11	w.	F. D. Dewey.	
Jacksonville.	Windham.	1,000	24	64.0	- 1.6	89 29	39 9	39 1.68	- 3.05	0.50	0.0	6 24	6 1	nw.	Miss Martha French.	
Manchester.	Bennington.	980	10	64.0	...	85 29†	40 9	39 2.08	- 2.92	0.65	0.0	8 13	14 4	sw.	N. M. Canfield.	
St. Johnsbury.	Caledonia.	711	16	68.3	+ 0.7	99 28	41 5	46 2.83	- 1.51	0.93	0.0	10 19	7 5	n.	Fairbanks Museum.	
Woodstock.	Windsor.	700	17	64.7	- 3.6	90 29	40 2	36 2.27	- 1.42	0.56	0.0	7 2	8 21	...	John S. Eaton.	
<i>Massachusetts.</i>																
Amherst.	Hampshire.	223	20	68.8	- 1.7	93 30	42 9	40 2.24	- 2.24	1.50	0.0	6 16	12 3	nw.	Agricultural Exp. Stat'n.	
Blue Hill.	Norfolk.	640	25	68.7	- 0.5	96 30	47 9	28 1.25	- 1.45	0.56	0.0	11 11	11 9	w.	Blue Hill Observatory.	
Boston.	Suffolk.	125	39	71.5	+ 0.2	95 30	53 9	27 0.97	- 2.39	0.43	0.0	5 8	18 5	w.	U. S. Weather Bureau.	
Chestnut Hill.	Suffolk.	124	29	71.0	- 0.6	98 30	47 5	36 1.10	- 2.52	0.43	0.0	7 23	2 6	...	Metrop. Water Board.	
Clinton.	Worcester.	370	13	68.4	...	90 30	30 4	48 2.03	- 0.23	2.73	0.0	8 20	7 4	...	Metrop. Water Board.	
Middlesex.	Middlesex.	139	19	67.8	- 2.1	93 30	44 9	36 2.36	+ 0.36	2.33	0.0	9 9	16 6	nw.	F. A. Tower.	
Fall River.	Bristol.	200	43	69.2	- 1.5	90 30	48 9	26 0.43	- 2.61	0.20	0.0	5 13	18 0	sw.	C. V. S. Remington.	
Fitchburg.	Worcester.	550	26	69.3	- 1.3	93 30	48 9	32 2.48	- 1.74	0.90	0.0	9 18	10 3	w.	Dr. A. P. Mason.	
Framingham.	Middlesex.	180	29	70.1	- 1.3	95 30	47 8	34 1.63	- 1.94	0.60	0.0	8 3	24 2	sw.	Metrop. Water Board.	
Hyannis.	Barnstable.	31	18	69.2	- 3.6	91 30	52 5	23 2.33	- 2.34	0.15	0.0	5 24	5 2	sw.	C. F. Sleeper.	
Lawrence.	Essex.	51	25	69.4	- 3.2	94 30	48 9	32 2.62	- 0.83	1.34	0.0	7 8	20 3	sw.	Essex Company.	
Lowell.	Middlesex.	100	24	70.5	- 1.0	92 30	45 7	32 2.52	- 1.18	1.45	0.0	5 10	14 4	sw.	Prop's. Locks and Canals.	
Middleboro.	Plymouth.	53	23	67.0	- 2.2	93 30	41 5	36 1.33	- 1.75	0.49	0.0	7 3	20 8	sw.	A. R. Gurney.	
Monson.	Hampden.	420	25	66.9	- 0.6	82 15	54 10	18 0.98	- 1.70	0.56	0.0	7 13	15 3	sw.	Dr. G. E. Fuller.	
Nantucket.	Nantucket.	15	23	66.9	...	82 15	54 10	18 0.98	- 1.70	0.56	0.0	7 13	15 3	sw.	U. S. Weather Bureau.	
New Bedford.	Bristol.	88	97	71.0	+ 1.6	88 30	51 9	29 2.25	- 1.55	0.40	0.0	24 9	1 6	sw.	City Engineer.	
Norfolk.	Norfolk.	244	6	66.8	...	97 30	36 5	43 0.90	- 1.87	0.40	0.0	9 20	2 2	w.	Miss Ruby H. Martyn.	
Northampton.	Hampshire.	205	1	66.2	...	92 30	43 5†	35 1.57	...	0.87	0.0	6 23	3 5	nw.	D. E. Hoxie.	
Plymouth.	Plymouth.	24	67.4	...	90 31	48 9	29 1.89	- 1.21	0.86	0.0	7 23	6 2	sw.	Miss L. B. Knapp.		
Provincetown.	Barnstable.	40	22	70.7	+ 1.0	90 30	53 5†	28 0.97	- 1.83	0.41	0.0	4 25	6 0	sw.	Gideon Bowley.	
Rockport.	Essex.	25	7	66.4	...	85 28†	53 9	24 2.97	0.00	1.45	0.0	6 17	10 4	sw.	C. F. P. Bearse.	
Rutland.	Worcester.	1,100	7	66.7	...	88 15†	46 8	29 5.18	+ 0.89	3.09	0.0	9 18	11 2	sw.	State Sanatorium.	
South Egremont.	Berkshire.	784	7	65.6	...	91 30	40 5†	38 2.77	- 1.52	1.40	0.0	7 7	...	nw.	Roscoe C. Taft.	
Turners Falls.	Franklin.	200	18	68.3	- 1.1	90 30	46 8	32 1.68	- 2.45	0.58	0.0	4 22	5 2	sw.	Turners Falls Co.	
Westboro.	Worcester.	295	35	70.8	- 1.3	97 30	44 5	39 1.65	- 1.73	0.51	0.0	6 6	12 5	w.	G. S. Newcomb.	
Williamstown.	Berkshire.	711	28	68.8	- 1.8	98 15	43 9	33 1.51	- 3.00	0.76	0.0	9 12	14 5	w.	Williams College.	
Worcester.	Worcester.	518	17	70.0	- 1.4	93 30	51 9	23 1.14	- 2.70	0.25	0.0	7 15	11 5	sw.	G. W. Swan.	
<i>Rhode Island.</i>																
Newport.	Newport.	26	29	67.8	- 0.3	84 30	54 9	18 0.93	- 2.38	0.44	0.0	5 26	2 3	sw.	U. S. Weather Bureau.	
Bristol.	Bristol.	53	23	69.0	- 1.3	82 30	52 9	20 0.58	- 2.32	0.36	0.0	4 24	5 2	sw.	N. G. Herreshoff.	
Kingston.	Washington.	250	20	67.8	- 1.4	92 30	43 9	21 1.51	- 2.01	0.60	0.0	6 19	9 2	sw.	Nathaniel Heime.	
Narragansett Pier.	Newport.	22	27	66.8	- 3.1	87 30	46 5	29 1.16	- 2.16	0.57	0.0	6 26	2 3	s.	U. S. Weather Bureau.	
Providence.	Providence.	182	5	70.2	- 3.2	94 30	51 9	26 0.58	- 2.73	0.31	0.0	5 14	13 4	nw.	Do.	
<i>Connecticut.</i>																
Fairfield.	Fairfield.	20	16	71.4	...	96 30	50 9	33 2.50	- 3.86	1.73	0.0	5 21	9 1	sw.	Wm. Jennings.	
Canton.	Hartford.	900</														

TABLE 1.—Climatological data for July, 1909. District No. 1—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.	Precipitation, in inches.	Sky.	Prevailing wind direction.	Observers.												
				Mean.	Greatest daily range.	Total.	Number of rainy days, unmeted.	Number of partly cloudy days.	Number of clear days.	Number of .01 inch or more.	Number of cloudy days.									
New York—Cont'd.																				
Bedford.	Westchester.	450	11	72.6	+ 0.7	98	30	48	5	39	2.78	- 2.44	2.01	0.0	6	17	11	3	...	
Binghamton.	Broome.	875	12	67.4	- 2.5	89	15	43	5	36	1.07	- 2.47	0.40	0.0	6	8	9	14	nw.	
Buckville.	Madison.	1,350	12	65.3	- 2.8	88	15	42	9	35	3.05	- 1.74	1.01	0.0	8	7	14	10	nw.	
Boys Corners.	Putnam.	580	27																	
Carmel.	Putnam.	500	17	70.4	- 1.7	91	13†	53	4†	34	3.43	- 2.77	1.56	0.0	4	22	3	7	sw.	
Chatham.	Columbia.	470	8	68.4	- 3.3	91	13†	44	5	35	1.89	- 1.14	1.50	0.0	7	18	11	2	s.	
Cooperstown.	Otsego.	1,250	55	64.8	- 3.3	86	12	43	9	29	5.65	- 1.14	0.90	0.0	12	11	16	4	nw.	
Corinth.	Saratoga.	543																		
Cortland.	Cortland.	1,129	47	66.8	- 0.3	89	15	41	5	35	2.62	- 2.26	0.60	0.0	7	26	3	2	...	
Cutchogue.	Suffolk.	32	32	70.6	- 1.4	93	30	51	6†	31	1.25	- 2.10	0.91	0.0	5	9	11	1	sw.	
De Ruyter.	Madison.	1,300	6	66.0	-	88	14†	37	8	41	4.55	-	0.75	0.0	9	17	7	7	nw.	
Easton.	Washington.	19																		
Elmira.	Chemung.	863	27	69.9	- 2.3	94	15	43	8	44	1.46	- 2.04	0.63	0.0	5	14	13	4	sw.	
Fort Hunter.	Montgomery.	280																		
Fort Plain.	Montgomery.	316	5	69.6	-	91	15	45	9	35	4.27	-	1.35	0.0	7	14	15	2	w.	
Glens Falls.	Warren.	340	15	68.8	- 2.0	92	30	45	5†	37	1.86	- 2.08	0.62	0.0	9	6	13	12	w.	
Gloversville.	Fulton.	850	17	65.6	- 3.3	88	28	40	9	37	4.87	- 0.49	1.05	0.0	7	13	17	1	w.	
Greenfield Center.	Saratoga.	314	11	67.2	- 2.6	90	13†	41	9	37	3.07	- 1.13	0.85	0.0	7	14	15	3	w.	
Greenwich.	Washington.	425	12	70.4	+ 0.3	95	30	46	9	37	1.57	- 2.17	0.55	0.0	8	11	17	3	nw.	
Griffin Corners.	Delaware.	2,260	9	63.1	-	87	15†	35	5†	44	1.12	-	0.79	0.0	8	20	7	4	w.	
Hancock.	Herkimer.	9																		
Haskinville.	Steuben.	9																		
Hoosick Falls.	Rensselaer.	410																		
Indian Lake.	Hamilton.	1,705	10	63.3	-	90	14†	30	9	55	2.35	-	0.60	0.0	9	17	5	9	w.	
Jeffersonville.	Sullivan.	1,240	6	65.2	-	90	14	35	5	46	2.12	-	1.42	0.0	4	23	6	2	w.	
Lake Pleasant.	Hamilton.	65.2				84	21	36	1†	44										
Liberty.	Sullivan.	2,300	23	65.8	- 1.2	87	29	43	5	29	2.10	- 3.05	1.45	0.0	3	18	8	5	nw.	
Little Falls.	Herkimer.	924	11	67.1	- 2.4	90	15	44	9	36	4.63	- 0.23	1.46	0.0	9	16	14	1	w.	
Mohonk Lake.	Ulster.	1,245	13	68.2	- 1.8	87	30	50	9	23	2.24	- 3.92	1.67	0.0	3	22	5	4	sw.	
Morehouseville.	Hamilton.	1,097	1	62.2	-	87	15	34	9	45	4.85	-	1.20	0.0	13	16	4	11	w.	
Mount Hope.	Westchester.	200	12	69.8	- 3.4	95	30	43	9	41	3.10	- 3.14	1.40	0.0	6	11	18	2	...	
Newark Valley.	Tioga.	825	10	-																
New Berlin.	Chenango.	2																		
New Lisbon.	Otsego.	1,234	19	62.8	- 2.9	88	15	33	9	44	3.75	- 1.33	1.34	0.0	8	12	10	9	nw.	
New York City.	New York.	314	84	73.4	- 0.1	92	30	58	4	24	1.98	- 2.56	1.50	0.0	5	13	5	3	s.	
North Creek.	Warren.	1,002	1	66.4	-	86	15†	40	4†	30	2.12	-	0.97	0.0	5	15	10	6	nw.	
Northville.	Fulton.	742																		
Norwich.	Chenango.	1,015	3	67.0	-	90	16	40	5†	36	3.95	-	1.12	0.0	7	16	11	4	...	
Oneonta.	Otsego.	1,112	15	67.6	- 2.6	90	29†	40	9	41	2.97	-	2.02	1.12	0.0	8	21	7	3	nw.
Oxford.	Chenango.	916	44	60.2	- 2.2	88	11†	40	9	38	2.75	-	1.62	1.40	0.0	6	11	17	3	w.
Port Jervis.	Orange.	470	25	70.0	- 1.0	95	29†	42	5†	44	1.37	-	4.00	0.72	0.0	5	24	5	3	w.
Salsbury.	Herkimer.	1,526	12	65.4	- 3.1	88	15	40	9	38	4.97	-	0.61	2.00	0.0	10	8	20	3	w.
Salsbury Mills.	Orange.	314	10	69.0	-	93	30	45	9	35	2.05	-	2.15	1.15	0.0	3	25	4	2	w.
Scarsdale.	Westchester.	200	5	70.5	-	93	30	50	5†	36	3.46	-	1.83	0.0	6	21	10	0	w.	
Setauket.	Suffolk.	40	24	71.0	- 1.0	92	30	53	10	28	2.44	-	2.10	1.50	0.0	3	23	6	2	w.
Sherburne.	Chenango.	36	2	-																
Southampton.	Suffolk.	86	9	69.0	-	85	30	50	9	29	2.54	-	1.62	0.0	5	21	9	1	nw.	
Southeast Reservoir.	Putnam.	310	14	-																
Spiers Falls.	Saratoga.	400	8	67.8	-	91	15	43	9	36	2.33	-	0.73	0.0	6	17	11	3	sw.	
Trenton Falls.	Oneida.	751																		
Tribes Hill.	Montgomery.	263																		
Utica.	Montgomery.	395	4	-																
Wading River.	Oneida.	112	3	69.8	-	95	30	45	10	35	1.74	-	0.95	0.0	7	25	5	1	s.	
Wappingers Falls.	Dutchess.	112	19	70.0	- 3.2	91	30	49	5	30	2.70	-	2.57	1.24	0.0	4	18	12	1	sw.
Warwick.	Orange.	538	9	-																
Waverly.	Tioga.	S24	20	68.4	- 1.9	94	15	35	5	50	1.16	- 2.82	0.50	0.0	7	10	18	3	nw.	
West Berne.	Albany.	938	29	66.2	-	90	12†	36	9	42	2.90	-	0.79	0.0	7	14	13	4	w.	
West Point.	Orange.	187	60	72.4	- 1.6	96	31	53	8	31	2.00	-	2.88	0.80	0.0	5	21	9	1	e.
Windham.	Greene.	1,520	10	63.8	-	89	28	37	10	40	1.73	-	0.77	0.0	6	15	15	1	nw.	
Pennsylvania.	Blair.	1,181	21	67.4 ^a	- 4.2	90 ^a	1	40 ^a	5	44 ^a	2.37	- 1.26	0.91	0.0	7					
Bellefonte.	Center.	826	8	72.8	- 0.7	96	11	43	8†	48	1.34	- 3.02	0.60	0.0	5	21	8	2	...	
Center Hall.	Center.	1,272	10	69.6	- 2.0	90	1†	44	8	41	1.53	- 2.64	0.60	0.0	7	14	9	8	...	
Clearfield.	Clearfield.	1,107	1	67.3	-	90	1†	37	5†	43	2.52	-	2.02	0.0	7	20	9	2	nw.	
Coatesville.	Chester.	380	21	72.8	- 1.8	90	30	47	5	38	1.18	- 3.88	0.56	0.0	3	17	12	2	w.	
Dritton.	Sullivan.	1,633	11	66.2	- 2.8	87	15	42	9	40	2.04	-	2.38	1.10	0.0	7	23	5	3	w.
Dushore.	Easton.	1,590	11	-																
Sullivan.	Northampton.	325	26	71.8	- 2.0	92	1†	49	4†	35	3.02	-	1.71	0.0	0	5	23	5	3	w.
Easton.	Empordum.	1,050	2	67.2	- 3.5	88	11	42	5†	40	1.95	-	2.84	0.95	0.0	7	16	14	1	w.
Ephrata.	Cameron.	384	9	71.8	- 3.1	94	29†	48	20†	41	2.70	-	2.14	2.27	0.0	3	12	9	3	w.
Everett.	Bedford.	1,080	11	69.2	- 3.0	91	30	42	8	39	1.74	-	2.53	0.68	0.0	6	13	17	1	nw.
George School.	Bucks.	94	30	72.2 ^c	-	94	30	45 ^b	5	38 ^b	1.35	-	0.87	0.0	0	5	25	4	2	nw.
Gettysburg.	Adams.	600	35	73.0	- 0.8	97	30	46	5	41	0.85	-	2.62	0.46	0.0	4	17	12	2	nw.
Gordon.	Schuylkill.	804	5	67.8	- 2.6	92	29	37	5	47	2.74	-	1.84	0.82	0.0	6	19	9	3	w.
Hamburg.	Berks.	380	13	71.8 ^a	- 2.5	96	30	46	5	39 ^a	1.53	-	3.59	0.84	0.0	3	24	5	2	nw.
Hanover.	York.	600	4	74.2	-	97	29	47	5	33	0.77	-	0.52	0.4	0	4	12	19	0	...
Harrisburg.	Dauphin.	361	21	73.4	- 1.1	94	30</													

MONTHLY WEATHER REVIEW.

JULY, 1909

TABLE 1.—Climatological data for July, 1909. District No. 1—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.			Precipitation, in inches.			Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days 0.1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.										
Pennsylvania—Cont'd.																			
Schroon.	Lackawanna.	805	9	69.4	-2.4	91	29	46	5	35	3.23	-1.60	1.01	0.0	7	8	18	5	sw.
Selinsgrove.	Snyder.	455	21	71.0	-2.7	94	30	41	5	43	1.12	-3.29	0.53	0.0	4	2	25	4	nw.
State College.	Center.	1,191	21	67.8	-2.9	88	1†	47	8	33	2.31	-1.61	1.50	0.0	5	5	5	3	w.
Towanda.	Bradford.	754	14	68.1	-2.3	92	30	40	5	41	1.01	-2.85	0.56	0.0	5	23	5	3	nw.
Wellsville.	Tioga.	1,327	32	68.8	-2.1	91	30	36	5	46	0.96	-2.69	0.63	0.0	5	17	14	0	w.
West Chester.	Chester.	455	55	73.2	-1.0	93	30	51	5	30	0.96	-3.96	0.61	0.0	7	20	8	3	se.
Wilkes-Barre.	Luzerne.	575	24	71.2	-1.6	97	30	44	5	40	1.24	-3.04	1.12	0.0	3	11	17	3	se.
Williamsport.	Lycoming.	530	19	70.6	-2.5	91	30	46	5	36	0.75	-3.25	0.75	0.0	1	19	10	2	nw.
New Jersey.																			
Asbury Park.	Monmouth.	22	21	71.0	-1.7	94	30	54	5†	29	1.07	-4.19	0.88	0.0	4	13	15	3	w.
Atlantic City.	Atlantic.	16	38	71.8	-0.7	92	30	52	5	25	1.37	-2.41	0.78	0.0	9	12	10	2	sw.
Bayonne.	Hudson.	50	19	72.3	-2.8	95	30	52	5	31	1.79	-3.25	1.30	0.0	5	16	13	2	nw.
Bergen.	Warren.	289	19	69.6	-3.8	93	1†	40	5	42	2.77	-2.54	1.43	0.0	6	14	15	2	se.
Bergen Point.	Hudson.	37	12	72.0	-2.4	94	30	52	5	32	1.79	-3.13	1.42	0.0	5	16	13	2	dw.
Boonton.	Morris.	413	19	74.2	-3.0	99	30	49	4†	36	1.61	-2.20	0.88	0.0	9	15	12	4	sw.
Bridgeton.	Cumberland.	30	34	74.2	-3.0	99	30	49	5	35	1.89	-2.93	1.41	0.0	3	15	12	4	nw.
Burlington.	Burlington.	12	25	.....	.....	.....	.....	.....	.....	.....	1.83	-2.81	0.75	0.0	2	12	16	3	.....
Canton.	Salem.	24	15	.....	.....	.....	.....	.....	.....	.....	2.11	-2.61	0.0	0.0	4	.....	.....	.....	.....
Cape May City.	Cape May.	17	25	71.6	-1.8	91	30	60	4†	21	1.39	-2.39	0.71	0.0	9	12	16	3	.....
Cape May C. H.	Cape May.	19	22	72.6	-1.5	90	30	53	10	26	1.61	-2.50	0.80	0.0	6	13	14	4	s.
Charlotteburg.	Passaic.	719	17	67.7	-2.4	91	1†	40	5†	42	2.42	-2.50	1.39	0.0	6	15	13	3	w.
Chatham.	Morris.	234	7	.....	.....	.....	.....	.....	.....	.....	1.68	0.80	0.5	0.0	5	.....	.....	.....	.....
Clayton.	Gloucester.	128	18	73.3	-1.8	93	12†	50	10	37	1.85	-2.87	1.62	0.0	3	13	16	2	w.
College Farm.	Middlesex.	100	14	72.2	-2.4	94	1	47	5	35	3.45	.....	1.42	0.0	8	15	12	4	se.
Culver's Lake.	Sussex.	848	8	.....	.....	.....	.....	.....	.....	.....	2.40	.....	1.48	0.0	6	12	17	2	nw.
Dover.	Morris.	575	25	68.6	-2.9	93	30	42	9	39	1.81	-3.82	1.20	0.0	6	14	15	2	.....
Elizabeth.	Union.	33	30	73.6	-1.9	95	30	52	5	33	1.66	-3.73	0.84	0.0	4	14	13	4	nw.
Englewood.	Bergen.	135	23	72.2	-0.3	93	30	56	4†	26	1.98	-3.39	1.49	0.0	5	16	8	7	s.
Flemington.	Hunterdon.	187	21	72.0	-3.0	94	1†	47	5	40	3.32	-2.51	1.62	0.0	6	15	14	2	sw.
Freshfield.	Monmouth.	187	28	.....	.....	.....	.....	.....	.....	.....	1.50	.....	1.07	0.0	4	.....	.....	.....	.....
Friesburg.	Salem.	100	18	72.0	-3.0	94	30	46	5	36	1.88	-2.55	1.71	0.0	4	14	14	3	w.
Haddonfield.	Camden.	75	1	73.2	.....	95	13†	48	5	36	2.27	.....	1.17	0.0	5	14	13	3	sw.
Hammonton.	Atlantic.	80	12	.....	.....	.....	.....	.....	.....	.....	2.04	2.07	1.73	0.0	5	.....	.....	.....	.....
Hightstown.	Mercer.	85	18	72.5	-2.2	96	30	44	5	42	2.62	-2.83	1.56	0.0	4	17	12	2	sw.
Imlaystown.	Monmouth.	106	23	.....	.....	.....	.....	.....	.....	.....	1.50	.....	1.07	0.0	4	.....	.....	.....	.....
Indian Mills.	Burlington.	76	9	72.0	-3.5	96	30	43	10	40	2.95	-1.27	1.85	0.0	5	17	12	2	se.
Jersey City.	Hudson.	15	4	74.2	.....	95	30	56	5	31	2.01	.....	1.64	0.0	4	15	14	2	s.
Lakewood.	Ocean.	54	8	72.1	.....	94	1†	45	10	34	1.44	.....	0.90	0.0	3	.....	.....	.....	.....
Lambertville.	Hunterdon.	95	23	71.8	-2.7	92	15†	45	6†	37	3.28	-1.83	1.59	0.0	6	14	15	2	sw.
Layton.	Sussex.	550	10	67.0	-3.9	94	15	36	5	46	1.52	-2.88	1.18	0.0	5	14	15	2	sw.
Little Falls.	Passaic.	175	7	.....	.....	.....	.....	.....	.....	.....	1.63	.....	0.75	0.0	6	.....	.....	.....	.....
Long Branch.	Monmouth.	30	1	71.8	.....	91	30	50	5	29	1.03	.....	0.78	0.0	3	13	15	3	sw.
Mahwah.	Bergen.	312	7	.....	.....	.....	.....	.....	.....	.....	2.14	.....	1.16	0.0	5	.....	.....	.....	.....
Moorestown.	Burlington.	71	47	73.2	-1.8	94	30	50	5†	35	1.72	-2.91	1.30	0.0	5	17	10	4	nw.
Newark.	Essex.	140	65	73.6	-0.8	94	30	53	10	29	1.57	-3.20	1.34	0.0	5	13	13	5	sw.
New Brunswick.	Middlesex.	61	58	71.2	-3.1	94	1†	45	5	40	4.03	-1.04	1.45	0.0	7	14	14	3	w.
Newton.	Sussex.	878	30	69.3	-2.8	93	30	42	5	39	2.14	-2.67	1.30	0.0	6	13	14	4	s.
Northfield.	Atlantic.	1	.....	.....	.....	.....	.....	.....	.....	.....	1.50	.....	1.07	0.0	4	.....	.....	.....	.....
Oceanic.	Monmouth.	16	23	71.9	-2.5	95	30	52	5†	33	1.76	-4.13	1.30	0.0	5	12	17	2	nw.
Paterson.	Passaic.	110	39	72.6	-1.7	96	30	51	5†	34	2.07	.....	1.57	0.0	6	10	19	2	nw.
Phillipsburg.	Warren.	198	7	71.6	-2.9	94	1†	47	5	37	2.86	.....	1.68	0.0	5	12	17	2	w.
Plainfield.	Union.	100	22	71.6	-2.9	96	30	45	5	40	1.39	4.75	1.00	0.0	7	15	14	2	sw.
Pleasantville.	Atlantic.	26	11	.....	.....	.....	.....	.....	.....	.....	1.54	-2.61	1.26	0.0	4	.....	.....	.....	.....
Pompton Plains.	Morris.	195	7	.....	.....	.....	.....	.....	.....	.....	2.98	.....	1.30	0.0	7	.....	.....	.....	.....
Port Norris.	Cumberland.	8	1	.....	.....	.....	.....	.....	.....	.....	1.50	.....	1.07	0.0	4	.....	.....	.....	.....
Rancocas.	Burlington.	68	46	.....	.....	.....	.....	.....	.....	.....	1.68	-3.35	1.50	0.0	5	18	8	5	nw.
Rivervale.	Bergen.	70	18	67.3	-5.1	95	13	40	6	44	2.21	-2.49	1.75	0.0	5	13	16	2	nw.
Runyon.	Middlesex.	18	3	.....	.....	.....	.....	.....	.....	.....	2.14	.....	1.16	0.0	5	.....	.....	.....	.....
Somerville.	Somerset.	76	30	72.4	-1.8	97	30	47	5†	40	2.61	-2.48	1.51	0.0	6	11	17	3	nw.
South Orange.	Essex.	200	40	70.8	-2.3	93	30	49	9	30	2.11	-3.08	1.56	0.0	5	11	18	2	sw.
Sussex.	Sussex.	442	19	69.2	-2.9	90	14†	44	9	36	1.70	-2.97	1.52	0.0	3	12	17	2	sw.
Trenton.	Mercer.	60	40	72.5	-4.2	94	30	50	10	34	2.52	-2.91	1.46	0.0	3	13	15	3	sw.
Tuckerton.	Ocean.	23	16	71.4	-3.1	95	30	44	10	36	2.44	-1.37	1.88	0.0	4	13	13	5	sw.
Vineland.	Cumberland.	118	42	.....	.....	.....	.....	.....	.....	.....	2.98	.....	1.30	0.0	7	.....	.....	.....	.....
Woodbine.	Cape May.	43	18	71.5	-2.2	91	30	47	5	32	2.40	-1.49	1.43	0.0	5	14	13	4	w.
West Virginia.	Grant.	2,500	6	65.2	.....	87	9	36	20	47	2.95	.....	1.77	0.0	8	18	7	5	w.
Bayard.	Mineral.	875	13	69.8	-3.6	94	30	42	19	30	0.90	-2.92	0.70	0.0	2	19	19	1	w.
Franklin ^b .	Pendleton.	3	68.4	.....	.....	90	22	42	20	39	1.55	.....	1.18	0.0	3	25	4	0	.....
Lost City.	Hardy.	3	68.9	.....	.....	89	31	46	8†	32	1.14	.....	0.60	0.0	4	16	9	6	w.
Martinsburg.	Berkeley.	435	18	74.0	-1.8	98	29†	50	5†	37	1.37	-2.92	0.70	0.0	3	21			

TABLE 1.—Climatological data for July, 1909. District No. 1—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number rainy days, .01 inch or more.	Number of partly cloudy days.	Number of clear days.		
<i>Maryland—Cont'd.</i>																			
Laurel.....	Prince George.....	150	15	72.8	- 3.1	97	30	47	5	38	1.59	- 3.25	0.55	0.0	7	14	16	1	sw.
Monrovia.....	Frederick.....	630	22	73.4	- 2.8	96	29	48	5 [†]	36	0.64	- 3.31	0.53	0.0	5	22	7	2	sw.
Ocean City.....	Worcester.....	10	—	—	—	—	—	—	—	—	—	—	0.80	0.0	—	—	—	—	—
Pocomoke City.....	Worcester.....	37	16	75.9	- 2.0	94	30	57	11	25	2.41	- 1.38	0.99	0.0	5	23	5	3	sw.
Porto Bello.....	St. Marys.....	38	4	76.5	—	95	30	58	5 [†]	29	0.84	—	0.84	0.0	1	24	5	2	se.
Princess Anne.....	Somerset.....	17	16	72.8	- 3.0	93	30	51	10	30	1.00	- 4.03	0.63	0.0	5	1	27	3	sw.
Rockville.....	Montgomery.....	421	2	73.2	—	92	30 [†]	52	5	30	0.37	—	0.12	0.0	6	21	8	2	sw.
Salisbury.....	Wicomico.....	23	4	74.4	—	97	30	53	10 [†]	32	2.15	—	1.55	0.0	6	15	14	2	sw.
Sanatorium.....	Frederick.....	—	—	71.4	—	92	31	50	4	30	0.31	—	0.17	0.0	3	18	3	10	sw.
Solomons.....	Calvert.....	20	18	76.4	- 1.8	93	30 [†]	59	4	24	1.44	- 3.14	0.83	0.0	5	6	14	11	se.
Sudlersville.....	Queen Annes.....	65	10	73.8	- 2.8	93	30	49	5	35	2.61	—	1.31	0.0	4	24	4	3	w.
Takoma Park.....	Montgomery.....	320	11	71.8	- 3.5	93	30	52	5	33	1.48	- 3.65	0.48	0.0	9	7	19	5	sw.
Taneytown.....	Carroll.....	450	10	72.0	- 4.2	95	29	44	20	38	0.92	- 3.72	0.42	0.0	6	25	6	0	se.
Towson.....	Baltimore.....	475	12	73.5	—	95	30	48	5	36	0.97	—	0.59	0.0	6	23	5	3	nw.
Van Bibber.....	Harford.....	100	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Westernport.....	Allegany.....	1,000	15	70.2	- 2.6	93	30	45	20 [†]	40	1.27	- 2.76	0.57	0.0	9	—	—	—	—
Woodstock.....	Baltimore.....	392	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>District of Columbia.</i>																	U. S. Weather Bureau.		
Washington.....	District of Columbia.....	112	39	74.7	- 2.1	96	29	53	5	30	1.80	- 2.85	0.61	0.0	10	15	14	2	nw.
<i>Delaware.</i>																	H. Morton Price.		
Delaware City.....	New Castle.....	10	7	73.9	—	93	30	53	5	26	0.62	—	0.63	0.0	1	28	2	1	s.
Dover.....	Kent.....	40	21	74.0	- 2.8	95	30	49	5	35	3.85	- 1.01	3.03	0.0	4	7	3	sw.	
Milford.....	Kent.....	39	25	74.5	- 2.3	97	30	54	10 [†]	32	2.64	- 1.10	0.73	0.0	10	22	6	3	se.
Millboro.....	Sussex.....	20	17	73.2	- 3.1	98	30	50	5	34	1.58	- 3.48	0.60	0.0	6	23	3	5	sw.
Seaford.....	Sussex.....	40	18	—	—	—	—	54	10	1.87	- 3.27	0.96	0.0	7	25	4	2	sw.	
<i>Virginia.</i>																	Col. H. C. Burrows.		
Culpeper.....	Culpeper.....	450	—	74.8	—	98	29	49	8	39	0.94	—	0.42	0.0	6	11	19	1	s.
Dale Enterprise.....	Rockingham.....	1,350	30	70.4	- 3.6	95	29	44	8	41	2.36	- 2.05	0.85	0.0	11	10	19	2	sw.
Doswell.....	Hanover.....	134	8	74.0	—	97	31	52	6	36	—	—	—	0.0	—	23	5	2	s.
Fredericksburg.....	Spotsylvania.....	100	20	74.6	- 2.6	98	29	49	8	38	2.36	- 2.30	1.80	0.0	8	18	11	1	se.
Lincoln.....	Loudon.....	500	8	75.2	- 0.9	100	29	44	8	47	0.69	- 3.50	0.35	0.0	4	13	17	1	nw.
Mt. Weather.....	Loudon.....	1,500	5	69.6	- 1.8	89	29	48	4	23	0.97	- 3.69	0.62	0.0	5	16	12	3	sw.
Nokeville (near).....	Fauquier.....	350	5	73.6	—	95	29	55	4 [†]	30	0.75	—	0.34	0.0	3	12	17	2	sw.
Quantico.....	Prince William.....	16	12	75.4	- 1.5	95	29	52	8	35	0.73	—	0.72	0.0	2	29	0	2	nw.
Shenandoah.....	Page.....	937	8	—	—	—	—	—	—	—	1.33	- 2.48	0.63	0.0	5	30	0	1	sw.
Staunton.....	Frederick.....	1,380	17	71.9	- 2.3	92	31	50	19 [†]	32	1.95	- 1.76	0.51	0.0	11	19	11	1	sw.
Stephens City.....	Frederick.....	710	17	73.2	- 2.6	98	29	40	9	47	1.06	- 3.13	0.58	0.0	4	24	6	1	w.
Warren.....	Richmond.....	160	17	72.5	- 5.2	93	29	51	8	34	2.25	- 2.68	1.38	0.0	7	14	14	2	s.
Woodstock.....	Shenandoah.....	927	13	73.6	- 1.5	96	15 [†]	47	20	39	1.54	- 1.94	0.70	0.0	3	13	17	1	w.

* Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.

† Precipitation included in that of the next measurement.

‡ Also on other dates.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

|| Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Estimate by observer.

||| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

*, †, ‡, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2.—*Daily precipitation for July, 1909. District No. 1, North Atlantic States.*

Stations.	River basins.	Day of month.																														Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
<i>Maine.</i>																																				
Bar Harbor	Coast.	T.	T.	1.20	.03		10	T.	.35	T.		T.	.03			.03	.23	.01		.10	.03	T.	.03									.50	2.66			
Cornish	Saco			1.03		T.	.08	.15								T.	.48	.38	T.	.01	T.	.08		.52									40	3.13		
Danforth	Penobscot	T.		.35	.25	.05	T.	.03	.55							.10	.54		.05			T.											2.02			
Debsconeag	do			.07	.02			.30								.20																		.60		
Eastport	Coast	.04		.43	.07	.03			.47	T.		T.	.02			.02	.13	.10																.53		
Fairfield	Kennebec			.60													.75																		.37	
Farmington	do			.04	.63	T.			.03								.85	.02		.20														.08		
Gardiner	do			.90				.04	T.	.53							.05	.05		.33														.05		
Greenville	do	.14		.67	.03	.03			.08								.18	T.																.17		
Houlton	St. John			.03					.05	.01	.09						.02																	.15		
Lewiston	Androscoggin	.97							.16	T.	.08																							.47		
Madison	Kennebec	.12		.59	T.				.03	.21							.14																	.25		
Millinocket	Penobscot	.13		.05	.50				.05		.08	.32					.10	.10															.09			
North Bridgeton	Saco	.90				.08			.04								.01																	.05		
Orono	Penobscot	.46		.36	.06	T.			.08	.31								.39	.25		.34												.10			
Quossooc	Androscoggin	.40			.80																														.30	
Patten	Penobscot	.06		.86		.50	.07		.20	.06							.30	.18															.64			
Portland	Coast	.93							T.	.04		.26																						.18		
Rumford Falls	Androscoggin	.67																																	.34	
The Forks	Kennebec	.10		.35	.67				.20									.28	.20															.50		
Van Buren	St. John	.20		.30	.70				.50								.30	.20																.60		
Winslow	Kennebec	.66							.14		.24																							.95		
<i>New Hampshire.</i>																																				
Astead Center	Connecticut	.83		.02	.03					T.								.05	.13	.02	.23													.43		
Benton	do	.46				.20	T.	.05									.12	T.																.13		
Bethlehem	Merrimac	.90				.04	T.	T.	T.									.25			.04													.87		
Brookline	do	1.04				.01												.06	.09	T.	T.	T.												.14		
Durham	do	.71				.27			.13																									.14		
Franklin	do	1.05							.01									.07	.01	.07	.06												.08			
Grafton	do	.80				.15			T.									.18	.21	.12	.01												.10			
Hanover	Connecticut	.02		.65		.02	T.											.02	.15	.15	.01												.58			
Keene	do																	.07	.17															.11		
Nashua	Merrimac	T.	.84						T.										.73			.13												.17		
Newton	Merrimac	.74				.06			T.									.16	T.	.10	T.												.29			
Plymouth	do	.75		.09	T.	T.		T.									.04			.39	.90	.08										.24				
West Ossipee	Saco	.80				.10												.70	.70															.10		
<i>Vermont.</i>																																				
Bloomfield	Connecticut	.07		.25	.20			.05		.04								.45			.43	.08	.68										.35			
Cavendish	do	.75		.12	.11												.18	.25	.11	T.	.08											.05				
Chelsea	do	.58																.15				.28	.12	.08									.25			
Jacksonville	do	.35	T.		.01													.50	T.	.02			.35	.45									.68			
Manchester	Hudson	.65																.10	.21	.35	.31	.24										.08				
St. Johnsbury	Connecticut	.46	T.		.23													.20																.23		
Woodstock	do	.56				.17												.34	.93	.13	.16	.06										.30				
<i>Massachusetts.</i>																																				
Amherst	Connecticut	T.	.30		.02					T.									.15																.24	
Ashland	Merrimac	.15				.18		.02										.19																.24		
Bakers Bridge	do	.55																.20	.29	.20	.50												.12			
Bedford	do	.02		.39	T.	T.	T.	T.										.02	.03	.08	.30											.52				
Blue Hill	Coast	.10		.T.	.01	.15		.01										.01	.18	.56	.15										.28					
Boston	do	T.	.20	T.		T.												.31	T.	.39	.04											.97				
Chestnut Hill	do	.02		.21		.05												.29			.37	.06										.10				
Clinton	Merrimac	.33			.02	.09												.27	.02	.36												.03				
Concord	do	.07		.43	.04	T.	.01										.20	T.	.36													.76				
Fall River	Coast	.02		.18														.03			.08												.43			
Fitchburg	Merrimac	.62			.04	.02											.28	T.	.14	.19	T.											.48				
Framingham	do	.14		.01	.20												.30			.36												.63				
Haverhill	do	.76			.03													.34	.18	.13												.80				
Hingham	Coast	.20		T.	.13												.01		.21	T.													.77			
Hyannis	do	.12			.14		.01																													

TABLE 2.—*Daily precipitation for July, 1909. District No. 1—Continued.*

Stations.	River basins.	Day of month.																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total			
<i>Connecticut—Cont'd.</i>																																				
Lake Konomoc.	Coast.	.04																																		
New Haven.	do.																																			
New London.	do.	T.	.10																																	
North Grosvenordale.	do.	.15																																		
Norwalk.	do.																																			
Southington.	do.																																			
South Manchester.	Connecticut.																																			
Storrs.	Coast.																																			
Torrington.	Housatonic.																																			
Voluntown.	Coast.	T.	.10																																	
Wallingford.	do.	.03																																		
Waterbury.	Housatonic.	T.	.08																																	
West Simsbury.	Connecticut.	T.	T.																																	
<i>New York.</i>																																				
Addison.	Susquehanna.																																			
Albany.	Hudson.	T.	.49																																	
Amsterdam.	Mohawk.	.83																																		
Athens.	Hudson.	.06																																		
Ballston Lake.	Hudson.	.77																																		
Bedford.	Coast.	T.																																		
Binghamton.	Susquehanna.	.07																																		
Buckville.	Susquehanna.	.55																																		
Boyd's Corners.	Hudson.																																			
Carmel.	do.																																			
Chatham.		.10																																		
Cooperstown.	Susquehanna.	.88	.02																																	
Corinth.	Hudson.	.50																																		
Cortland.	Susquehanna.	.35																																		
Cutchogue.	Coast.	T.																																		
De Ruyter.	Susquehanna.	.49																																		
Easton.	Hudson.	.57																																		
Elmira.	Susquehanna.	.40																																		
Fort Hunter.	Mohawk.	.83																																		
Fort Plain.		.62																																		
Glens Falls.	Hudson.	.86																																		
Gloversville.	Mohawk.	.86																																		
Greenfield Center.	Hudson.	.62																																		
Greenwich.	do.	.55	.08																																	
Griffin Corners.	Delaware.	.03																																		
Hancock.	do.																																			
Haskerville.	Susquehanna.	T.	.78	.11																																
Hoosick Falls.	Hudson.	.60																																		
Indian Lake.	do.																																			
Jeffersonville.	Delaware.	T.																																		
Lake Pleasant.	Hudson.																																			
Little Falls.	Mohawk.	.66																																		
Mohonk Lake.	Hudson.																																			
Morehouseville.	Mohawk.	1.20																																		
Mount Hope.	Coast.	T.																																		
Newark Valley.	Susquehanna.	T.																																		
New Berlin.	do.	.36																																		
New Lisbon.	do.	.30																																		
New York City.	Coast.	.01																																		
North Creek.	Hudson.	.61																																		
Northville.	do.																																			
Norwich.	Susquehanna.	.51																																		
Oneonta.	do.																																			
Oxford.	do.	.27																																		
Port Jervis.	Delaware.	.10																																		
Salisbury.	Mohawk.	.78																																		
Salisbury Mills.	Hudson.																																			
Scarsdale.	Coast.																																			
Setauket.	do.																																			
Sherburne.	Susquehanna.	.01																																		
Southeast Reservoir.	Coast.																																			
Spier Falls.	Hudson.	.83																																		
Trenton Falls.	Mohawk.	.75	.04																																	
Tribes Hill.	do.	.80																																		
Utica.	do.	.50																																		
Wading River.	Coast.																																			
Wappingers Falls.	Hudson.	T.																																		

TABLE 2.—*Daily precipitation for July, 1909.* District No. 1—Continued.

TABLE 2.—*Daily precipitation for July, 1909. District No. 1—Continued.*

TABLE 3.—Maximum and minimum temperatures at selected stations, July, 1909. District No. 1, North Atlantic States.

Date.	Maine.												Massachusetts.												Connecticut.																											
	Eastport.				Greenville.				Orono.				Portland.				Rumford Falls.				Concord, N. H.				Van Buren.				Amherst.				Boston.				Middleboro.				Nantucket.				Providence, R. I.				Green Hill.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.										
1..	76	49	70	53	79	55	81	58	77	55	70	54	80	60	83	63	84	68	86	63	88	61	87	66	84	56	87	65	84	56	87	64	80	56	87	65	84	56	87	65												
2..	66	51	63	47	79	49	68	57	63	50	62	50	58	70	58	76	62	77	52	70	58	79	60	78	63	78	78	64	78	78	60	79	60	78	78	64	78	78	60	79	59											
3..	54	47	55	40	67	48	70	54	65	50	62	49	50	54	70	56	76	58	77	57	75	59	75	57	75	57	75	57	75	57	75	57	75	57	75	57	75	57	75	59												
4..	65	48	64	49	72	50	67	51	67	50	72	37	73	43	77	74	78	56	73	56	73	49	71	56	73	53	73	53	73	53	73	53	73	53	73	53	73	53	73	53												
5..	66	49	62	41	71	44	74	50	63	46	72	37	73	43	77	74	78	56	73	56	73	41	71	57	77	52	70	47	78	78	53	70	47	78	78	53																
6..	69	48	69	38	74	42	70	53	70	45	73	49	70	50	78	51	77	60	79	46	71	58	79	57	74	50	79	55	75	54	77	53	75	54	77	53	75	55														
7..	65	46	72	35	77	43	72	54	76	47	83	44	78	46	71	58	75	49	68	71	75	56	75	55	77	60	81	53	77	60	81	53	77	60	81	53																
8..	61	45	66	41	78	46	75	52	70	48	70	47	77	48	73	45	82	51	81	45	75	57	81	55	77	60	81	53	77	60	81	53	77	60	81	53																
9..	77	49	76	49	80	43	72	50	73	50	82	45	78	46	83	42	71	53	76	45	83	56	78	51	79	51	79	51	79	51	79	51	79	51																		
10..	66	52	78	40	80	47	69	55	82	50	83	45	81	49	81	48	82	53	79	58	74	68	54	73	55	80	54	78	55	80	54	78	55	80	54	78	55															
11..	59	52	70	54	78	56	68	56	78	61	80	52	83	56	84	58	80	61	78	57	74	59	78	59	76	55	81	60	76	55	81	60	76	55	81	60																
12..	59	51	73	57	74	56	69	56	78	62	80	57	84	58	87	60	83	64	82	54	75	63	77	61	82	57	84	57	82	57	84	57	82	57	84	57																
13..	62	52	84	65	80	62	88	61	88	70	87	60	90	67	91	71	86	64	90	66	88	64	90	68	88	66	90	68	88	66	90	68	88	66	90	68																
14..	78	52	80	63	84	61	84	64	84	62	86	59	87	62	90	68	86	68	85	63	82	61	84	64	84	65	86	61	84	64	84	65	86	61	84	64																
15..	73	53	81	49	88	58	83	63	87	64	88	58	88	62	92	68	89	69	88	55	87	67	88	67	88	63	89	63	89	63	89	63	89	63	89	63																
16..	64	52	71	60	86	60	69	60	72	64	77	64	78	62	79	61	84	67	80	64	75	63	80	66	84	60	83	67	84	60	83	67	84	60	83	67																
17..	67	51	73	55	78	61	79	60	75	58	75	60	78	63	80	58	84	65	82	63	85	61	83	63	85	61	83	63	85	61	83	63	85	61	83	63																
18..	75	54	75	53	80	49	75	57	70	57	68	59	71	54	67	53	74	52	72	52	78	64	80	57	78	62	80	58	78	62	80	58	78	62	80	58																
19..	63	50	63	54	77	57	70	57	68	59	71	54	67	53	74	52	71	50	70	58	72	62	71	58	70	56	72	57	70	56	72	57	70	56																		
20..	65	50	68	53	77	56	70	50	66	51	71	57	65	55	78	53	78	54	70	60	74	69	75	55	72	54	75	55	72	54	75	55	72	54																		
21..	66	53	77	45	76	53	71	53	78	50	75	52	77	52	80	50	80	61	72	53	67	57	75	53	74	59	78	56	75	53	74	59	78	56																		
22..	62	49	65	55	76	53	61	53	65	60	77	55	77	57	82	52	82	60	75	47	67	56	73	57	71	53	73	57	71	53	73	57	71	53																		
23..	58	48	64	54	72	55	65	57	67	58	74	53	67	60	80	58	80	69	82	68	87	66	87	61	88	64	88	64	88	64	88	64	88	64	88	64																
24..	63	51	64	55	74	57	65	53	66	58	73	53	67	53	75	54	78	54	78	62	83	61	84	62	83	61	84	62	83	61	84	62	83	61	84	62																
25..	69	53	73	50	77	55	63	52	67	53	72	52	67	55	75	54	78	54	78	63	83	63	83	63	83	63	83	63	83	63	83	63	83	63	83	63	83	63														
26..	80	55	84	44	74	56	77	38	71	48	72	43	79	61	84	49	84	53	76	55	85	57	76	63	81	52	82	53	81	52	82	53	81	52	82	53																
27..	79	59	84	45	78	55	74	49	71	48	75	34	82	64	80	48	82	63	73	52	80	63	80	57	76	56	80	57	76	56	80	57	76	56	80	57																
28..	84	56	86	40	81	53	73	47	72	50	74	37	85	61	80	39	86	56	82	52	81	57	86	56	81	50	81	55	81	50	81	55	81	50	81	55																
29..	85	54	85	54	91	61	87	65	90	62	82	54	91	61	93	62	83	63	92	68	83	57	75	65	86	65	86	65	86	65	86	65	86	65	86	65																
30..	80	54	88	66	89	65	87	68	89	62	88	54	89	64	91	63	93	65	95	74	93	67	94	65	95	74	93	67	94	65	95	74	93	67	94	65																
31..	77	59	73	55	89	51	78	64	80	58	83	53	74	51	81	40	81	60	80	37	79	64	81	60	80	37	79	64	81	60	80	37	79	64	81	60	80	37														
Mns	80.5	61.5	85.7	55.2	81.3	60.4	79.0	55.8	74.5	55.2	78.7	47.9	81.4	65.5	82.2	52.4	83.9	59.7	81.8	56.5	83.4	63.5	83.8	60.8	80.6	58.2	82.5	61.2	80.6	58.2	82.5	61.2	80.6	58.2	82.5	61.2																

Date.	New Haven, Conn.												Pennsylvania.			
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TABLE 3.—*Maximum and minimum temperatures at selected stations, July, 1909. District No. 1—Continued.*